

Claims

1. Apparatus for cleaning surfaces fouled with chewing gum, comprising a mobile support structure for:

- 5 - at least one supply container for cleaning agent,
- a plurality of spray units coupled to the supply container for spraying with the cleaning agent a surface for cleaning fouled with chewing gum, wherein each spray unit is adapted to spray the same part-surface at least once during displacement of the support structure, and
- 10 - at least one pump for feeding cleaning agent under pressure to at least one spray unit,

wherein at least a front spray unit, as seen in the direction of displacement of the support structure, lies at least substantially in front of another, rear spray unit, characterized in that

- 15 the apparatus comprises pressure-generating means for bringing the cleaning agent under pressure such that the pressure of the cleaning agent sprayed on the surface for cleaning fouled with chewing gum lies substantially between 300 and 750 bar, and that the apparatus comprises heating means for heating the cleaning agent such that the temperature of the cleaning agent sprayed on the surface for cleaning fouled with
- 20 chewing gum amounts to a minimum of 115 degrees Celsius.

2. Apparatus as claimed in claim 1, characterized in that at least some of the number of spray units is adapted to spray the surface for cleaning in a substantially circular spray pattern.

25

3. Apparatus as claimed in claim 1 or 2, characterized in that the spray units are connected rotatably to the support structure.

30

4. Apparatus as claimed in any of the foregoing claims, characterized in that the apparatus is provided with at least two spray sets, each provided with at least two spray units, wherein the spray sets, as seen in the direction of displacement of the support structure, are positioned one behind the other.

5. Apparatus as claimed in any of the foregoing claims, characterized in that the apparatus is provided with suction means connected to the support structure for suctioning up cleaning agent applied to the surface.
- 5 6. Apparatus as claimed in any of the foregoing claims, characterized in that the apparatus is provided with brushing means connected to the support structure for brushing the surface for cleaning.
- 10 7. Apparatus as claimed in claim 6, characterized in that the brushing means are at least partially formed by at least one brush roller.
8. Apparatus as claimed in claim 7, characterized in that at least one brush roller is positioned between the front spray unit and the rear spray unit.
- 15 9. Apparatus as claimed in any of the claims 6-8, characterized in that the spray units and the brush means are at least partially shielded by a shielding element.
10. Apparatus as claimed in any of the foregoing claims, characterized in that the apparatus is provided with regulating means for regulating the temperature, pressure and/or the quantity of cleaning agent to be applied to the surface for cleaning.
- 20 11. Apparatus as claimed in any of the foregoing claims, characterized in that the relative orientation of the spray units and the support structure can be changed.
- 25 12. Apparatus as claimed in any of the foregoing claims, characterized in that the support structure is formed by a vehicle.
13. Apparatus as claimed in any of the foregoing claims, characterized in that the apparatus is provided with guide means for guiding the support structure in a predefined path.
- 30 14. Vehicle for cleaning surfaces fouled with chewing gum, wherein the vehicle is provided with at least one supply container for cleaning agent, a plurality of spray units for spraying with the cleaning agent a surface for cleaning fouled with chewing gum,

wherein each spray unit is adapted to spray the same part-surface at least once during displacement of the support structure, and at least one pump for feeding cleaning agent taken up from the supply container under pressure to at least one spray unit, wherein at least a front spray unit, as seen in the direction of displacement of the support structure,

- 5 lies at least substantially in front of another, rear spray unit,
characterized in that

the vehicle comprises pressure-generating means for bringing the cleaning agent under pressure such that the pressure of the cleaning agent sprayed on the surface for cleaning fouled with chewing gum lies substantially between 300 and 750 bar, and that the

- 10 vehicle comprises heating means for heating the cleaning agent such that the temperature of the cleaning agent sprayed on the surface for cleaning fouled with chewing gum amounts to a minimum of 115 degrees Celsius.

- 15 15. Method for cleaning surfaces fouled with chewing gum using an apparatus as claimed in any of the claims 1-13, comprising the steps of:

- a) causing displacement of the support structure,
- b) heating a cleaning agent to a temperature of at least 115 degrees Celsius,
- c) spraying a part-surface at least once with the heated cleaning agent under pressure using at least one front spray unit, and
- 20 d) spraying the same part-surface at least once with the heated cleaning agent under pressure using at least one rear spray unit,

wherein the pressure of the heated cleaning agent during spraying on the surface as according to step c) and step d) lies substantially between 300 and 750 bar.

- 25 16. Method as claimed in claim 15, characterized in that the cleaning agent is sprayed by the front spray unit and/or the rear spray unit onto the part-surface at a pressure of at least 310 bar.

- 30 17. Method as claimed in claim 15 or 16, characterized in that the cleaning agent sprayed by the front spray unit and/or the rear spray unit in the direction of the surface for cleaning has a temperature of at least 120 degrees Celsius, and preferably at least 150 degrees Celsius.